

ScreenBeam Pro Business Edition

Model # SBWD100B

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Introduction

Thank you for purchasing Actiontec's ScreenBeam Pro Wireless Display Receiver Business Edition. ScreenBeam Pro wirelessly streams what's on your Intel WiDi or Miracast™ compatible device to your HDTV, including movies, videos, photos, music, and more.

ScreenBeam Pro boasts many innovative features, including fast setup, enhanced security and IT manageability, Managed Meeting (Gen 5 WiDi), smooth video playback, full 1080p HD support, ultra-low delay, Windows 8.1 optimization, versatile compatibility, low power consumption, and more.

With ScreenBeam Pro, it's easy to host presentations and impromptu meetings, as users don't need to scramble to find the right HDMI or VGA cable to share a spreadsheet or presentation. And the Managed Meeting feature allows participants to share their own screens on the projector or HDTV monitor.

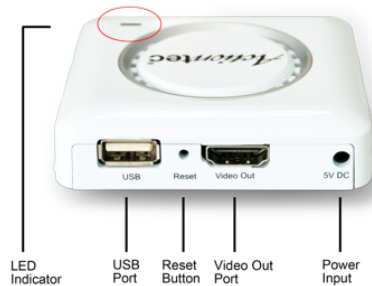
This user manual will take you through the procedures needed to install, connect, operate, configure, and upgrade ScreenBeam Pro.

Package Contents

The following items are in the ScreenBeam Pro Business Edition package:

- ♦ ScreenBeam Pro Business Edition Wireless Display Receiver (1)
- ♦ HDMI Cable (1)
- ♦ HDMI-to-VGA adapter (1)
- ♦ AC power adapter (1)
- ♦ Quick Start Guide

Features



- **Reset Button:** resets ScreenBeam Pro to its default setting
- **Video Out Port (HDMI):** connects ScreenBeam Pro to HDTV/projector for video and audio output.
- **Power Input:** connects to AC adapter
- **LED Indicator:** displays status of power supply
- **USB Port:** used for firmware upgrades

System Requirements

- Display device with one Type A HDMI port or VGA port
- Available power outlet

Compatible Devices

- Laptop or notebook computer with Intel WiDi 4 or higher
- Smartphone, tablet, or laptop running Windows 8.1
- Wi-Fi Miracast™ certified smartphones and tablets
- Non-WiDi/Miracast-ready laptops and PCs with Actiontec USB Transmitter (Windows 7 or higher)

Setting Up ScreenBeam Pro

2

This chapter details how to connect ScreenBeam Pro to an HDTV monitor, and how to set it up for the first time. Make sure you have all the contents from ScreenBeam Pro's package available before beginning the installation.

Connecting to an HDTV

To connect ScreenBeam Pro to an HDTV monitor, make sure you have the following items handy:

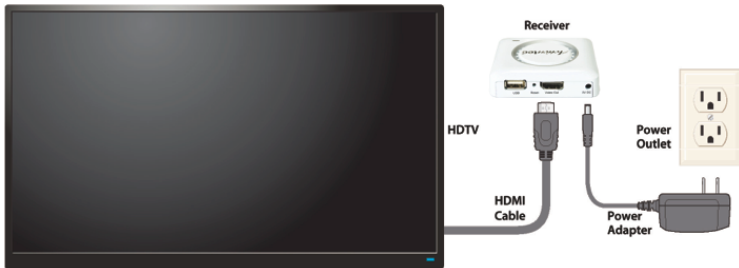
- ScreenBeam Pro
- HDMI cable
- AC power cord

To connect ScreenBeam Pro to an HDTV monitor:

1. Plug one end of the supplied HDMI cable into the HDMI port (Video Out) on ScreenBeam Pro, and the other end into an available HDMI port on the HDTV.
2. Plug the other end of the power cord into a nearby electrical outlet. The Power LED will illuminate green.

Setting Up ScreenBeam Pro

When Steps 1 and 2 are complete, the hardware should be connected as shown in the figure below:



3. Turn on the HDTV and set it to display the input from the HDMI port connected in step 1.
4. Make sure that the *Ready To Connect* screen appears on the HDTV.



The Receiver is now connected to the HDTV monitor, and is ready to use.

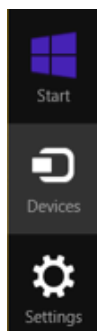
Setting Up the First Time

This section explains how to connect ScreenBeam Pro for the first time to a source device. There are three source device options: Windows 8.1, Intel WiDi, and Miracast™.

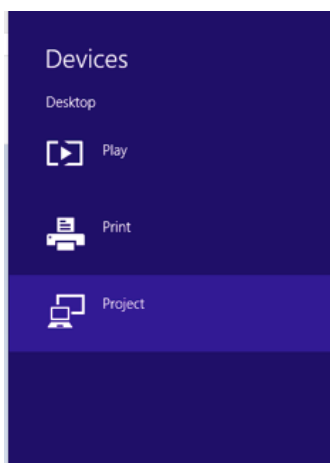
Windows 8.1

To connect to a source device running Windows 8.1:

1. From the Windows desktop, go to the **Charms** menu and select **Devices**.
You can also use the shortcut keys (Windows logo + K).

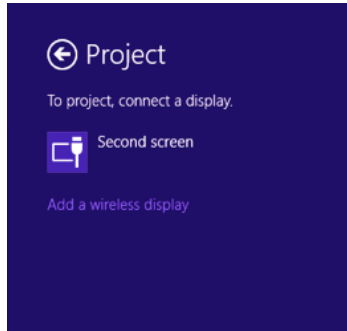


2. When the Devices menu appears, select **Project**.



Setting Up ScreenBeam Pro

3. When the “Project” menu appears, select **Add a wireless display**. Windows will search for available devices.

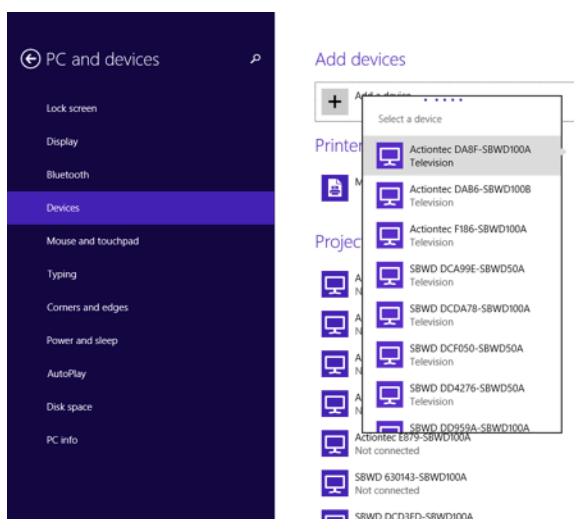


Note: If the device is running Windows 8.1 and the previous screens do not appear, go to

<http://www.actiontec.com/widi81>

to update the software. Alternatively, the Windows 8.1 device can be updated via the Windows Update application.

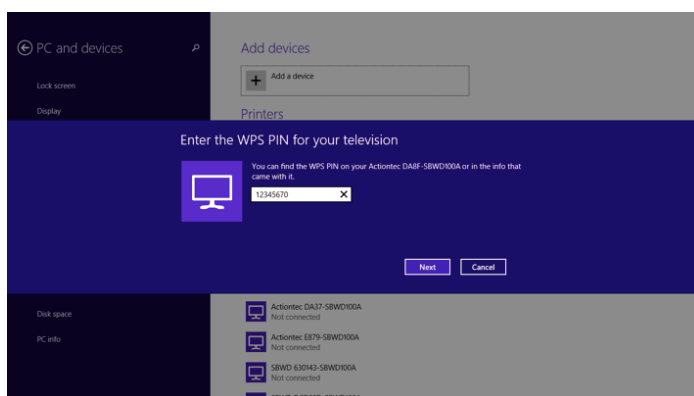
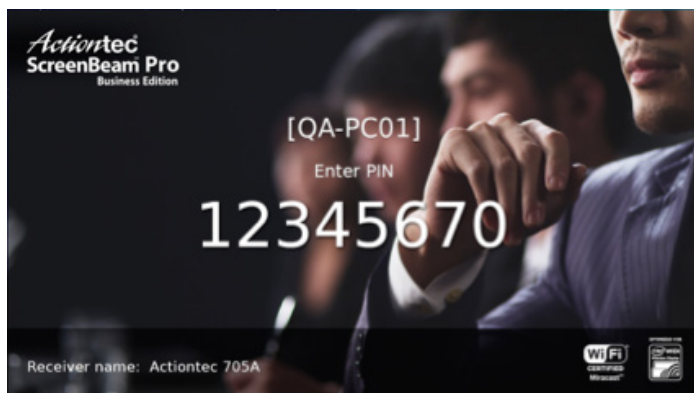
4. A “PC and devices” screen appears. Click **Devices** and, from the list that appears, select ScreenBeam Pro.



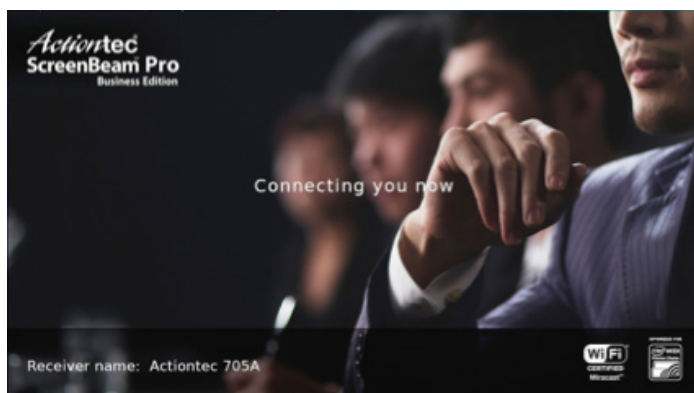
Setting Up ScreenBeam Pro

1. A PIN entry box is displayed on the screen of your Windows 8.1 device and a PIN entry countdown on the HDTV. Type the PIN provided by your network administrator in the PIN entry box and click **Next** to continue.

Note: Obtain the security PIN from your network administrator if no PIN is displayed on the connected display device. By default, the security PIN is “12345670.” If a PIN is displayed on the connected display device (see lower figure), type this PIN in the PIN entry box.



2. The HDTV displays messages to show the status of the connection.



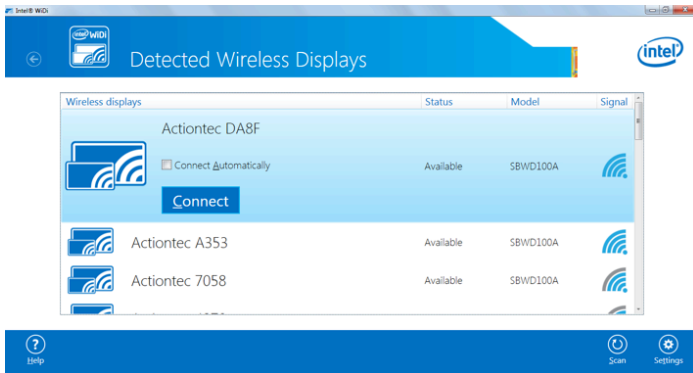
After connection, the device's screen should be displayed on the HDTV.

Setting Up ScreenBeam Pro

Intel WiDi

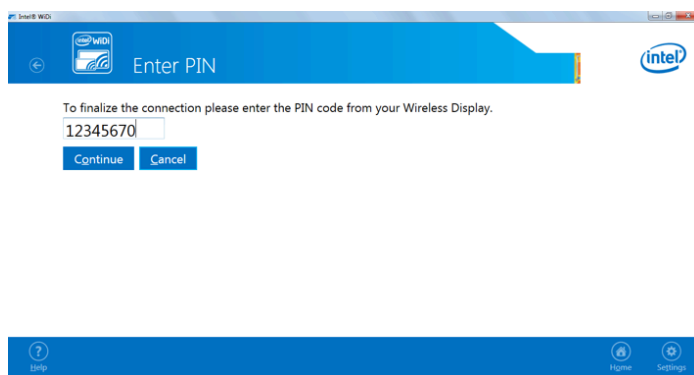
To connect to a source device running Intel WiDi:

1. Launch the **Intel Wireless Display** application on the device. To find the application, go to **Windows Search** on the device and search for “Intel WiDi”.
2. The application scans for available receivers automatically. Select your ScreenBeam Pro and click **Connect**. (The “Connect Automatically” checkbox is optional.) If your ScreenBeam Pro is not listed, click **Scan**.



3. A PIN entry box is displayed on the WiDi device's screen, and a PIN entry countdown on the HDTV. Type the PIN provided by your network administrator in the PIN entry box on the WiDi device, then click **Continue**.

Note: Obtain the security PIN from your network administrator if no PIN is displayed on the connected display device. By default, the security PIN is "12345670." If a PIN is displayed on the connected display device (see lower figure), type this PIN in the PIN entry box.



Setting Up ScreenBeam Pro

4. The HDTV displays messages to show the status of the connection.

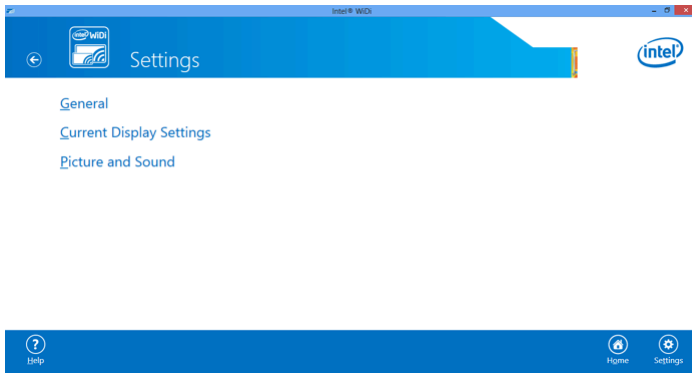


5. A “Connection Successful” screen appears on the device’s screen. Click **Finished**, and the device’s screen is displayed on the HDTV.

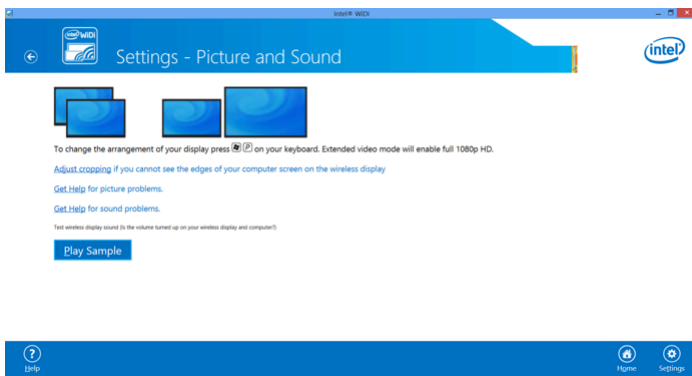
Adjusting the HDTV Picture

If edges of the device screen cannot be seen on the HDTV screen, or there are black around the picture, ScreenBeam Pro's cropping settings can be adjusted. To do this:

1. From the Intel WiDi application, click **Settings**.
2. The *Settings* screen appears. Click **Picture and Sound**.

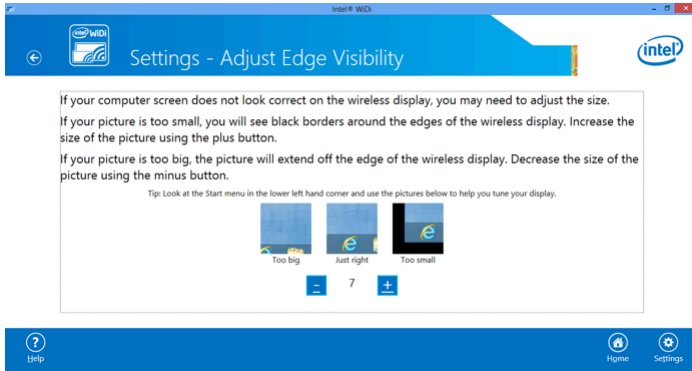


3. The *Picture and Sound* screen appears. Select **Adjust cropping**.



Setting Up ScreenBeam Pro

4. Adjust the HDTV picture by clicking + (plus sign) or - (minus sign).

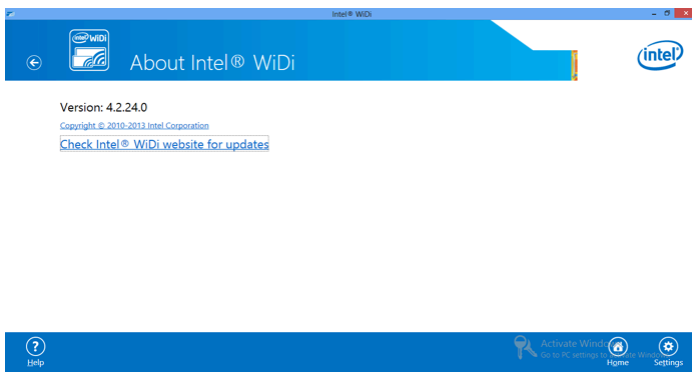


WiDi Software Version Support

Make sure the device supports Intel Wireless Display (WiDi) software version 3.5 or higher. To find out which version of Intel WiDi the device is running, launch the Intel WiDi application and click **Help**, then navigate to the *About Intel® WiDi* screen. To obtain the latest Intel WiDi software and drivers, go to:

<http://www.intel.com/go/wirelessdisplayupdate>

or click **Check Intel® WiDi website for updates.**



Miracast™

To connect a Miracast™-enabled Android device to the ScreenBeam Pro, use the following procedure. For best performance, the Miracast™ device should be running the latest software.

1. On a Miracast™-enabled Android device, locate and open the Wireless Display Application (check for the application under *Settings*).

Note: The name of the Wireless Display application depends on the device type and model. Refer to the device's user manual for more details.

2. The Wireless Display application scans for available devices. Select ScreenBeam Pro from the device list. You may be required to enter a PIN.

Note: Obtain the security PIN from your network administrator if no PIN is displayed on the connected display device. By default, the security PIN is "12345670." If a PIN is displayed on the connected display device, enter this PIN in the PIN text box.

3. Enter the PIN in the PIN text box, then click **Connect**.
4. Wait for the device to pair with and connect to your receiver. When it does, the device's screen will be displayed on the HDTV.

Tips for Optimal Performance

To get the most out of ScreenBeam Pro, note the following:

- Keep ScreenBeam Pro in line-of-sight in relation to the source device. Doing this will help ensure ScreenBeam Pro receives the best possible signal.
- ScreenBeam Pro's optimal wireless range is within 30 feet of the source device. However, actual range and effectiveness depends on many factors, including the amount of existing signal interference and the building materials used in the surrounding structure.
- Avoid placing ScreenBeam Pro near other possible sources of interference (such as electric fans or other devices with electric motors), microwave ovens, and cordless phones.

Display and Control Options

3

This chapter describes the various display modes and control options supported by ScreenBeam Pro - Business Edition.

Managed Meeting

ScreenBeam Pro supports Managed Meeting, which is provided with Intel WiDi (Gen 5). Managed Meeting allows meeting participants to share their screens interactively, or allows the owner (the first connected user who has set the interactive mode to “I can request others to present”) to manage other participants.

There are three meeting modes available when the Managed Meeting function is enabled:

- **Only 1 present** - No one else can share or take control.
- **Others can request to present** - Other people can request control/sharing.
- **I can request others to present** - you control sharing

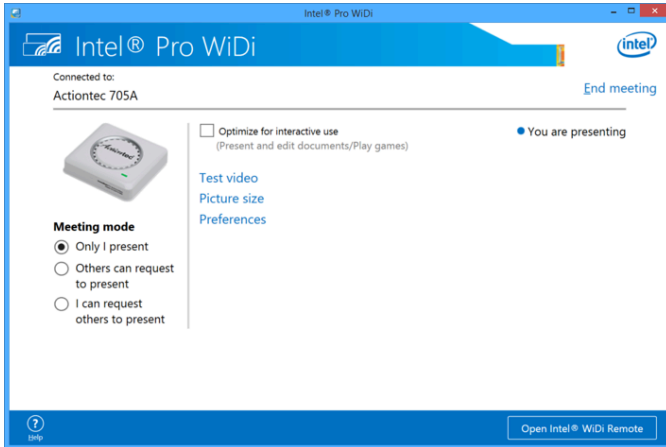
To use these meeting modes, you must enable Managed Meeting in the local management server. Refer to the section titled “Setting up Managed Meeting,” in this chapter.

Note: The Gen 5 Intel WiDi (WiDi 5.x.x.x) requires the Haswell systems.

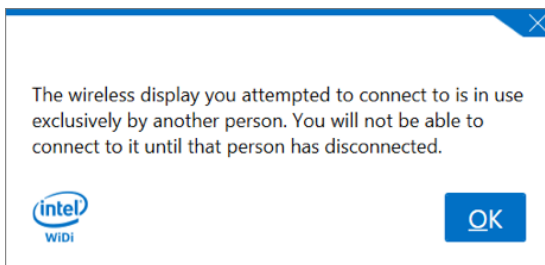
Display Options

Only 1 Present

This is an exclusive meeting mode, which gives you dedicated control/use of the ScreenBeam Pro wireless display. In this mode, other people cannot request control/sharing to the wireless display.

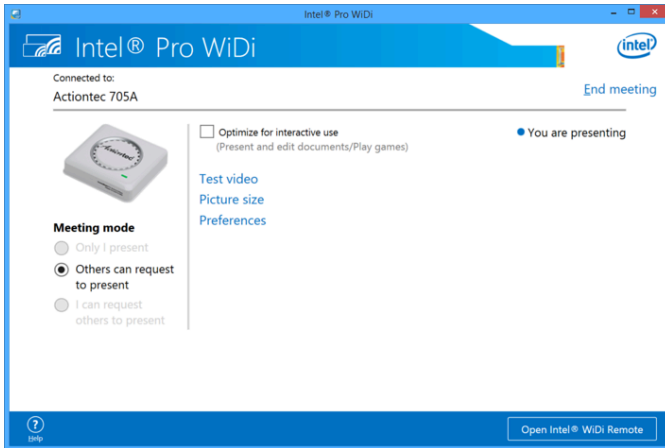


To activate “Only 1 Present” mode, click in the appropriate button in the Intel Pro WiDi screen. When this mode is active, other devices cannot connect to the projector/monitor. The following information screen appears when this mode is activated.

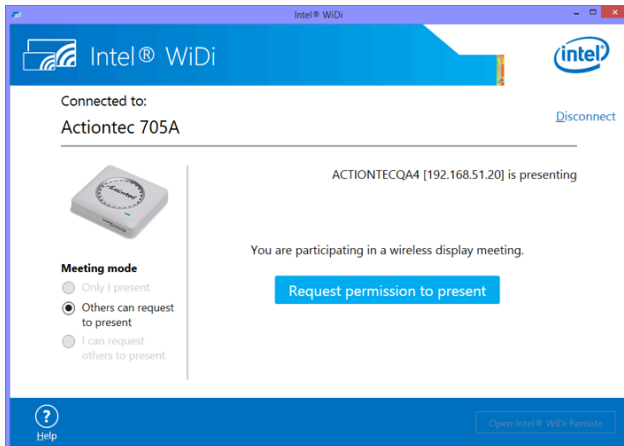


Others Can Request to Present

To share the projector/display with other attendees, select “Others can request to present” mode. This allows others with Intel Pro WiDi devices to request to share the projector/display. The sharing mode remains in effect until the device is disconnected from the projector/display.

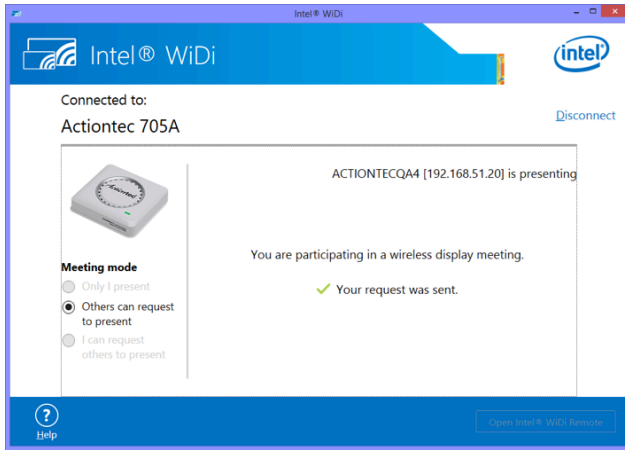


To connect to ScreenBeam Pro when in sharing mode, a request is made.

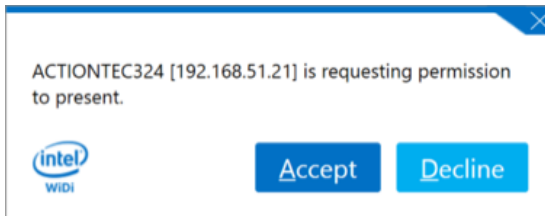


Display Options

The request is sent.



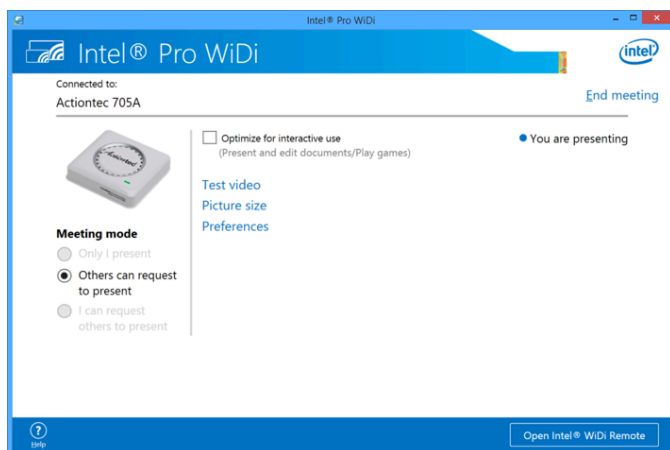
A message appears on the presenter's device.



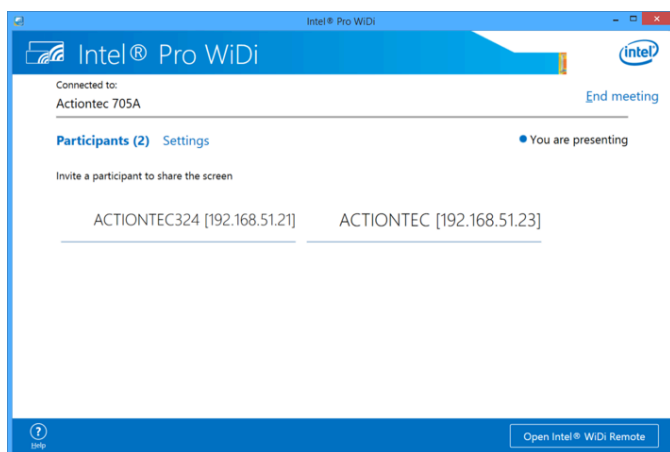
Click **Accept** to switch control to the device making the request, and the participant's device's screen will immediately be shown on the projector/display. Clicking **Decline** rejects the request. Any participant can click **Disconnect** (or close Intel Pro WiDi) to quit the meeting. The presenter can click **End Meeting** (or close Intel Pro WiDi) to end the meeting.

I Can Request Others to Present

To request other attendees to share the projector/display, select “I can request others to present” mode. This allows the presenter to request that other attendees with Intel Pro WiDi devices share the projector/display. The sharing mode remains in effect until the device is disconnected from the projector/display.

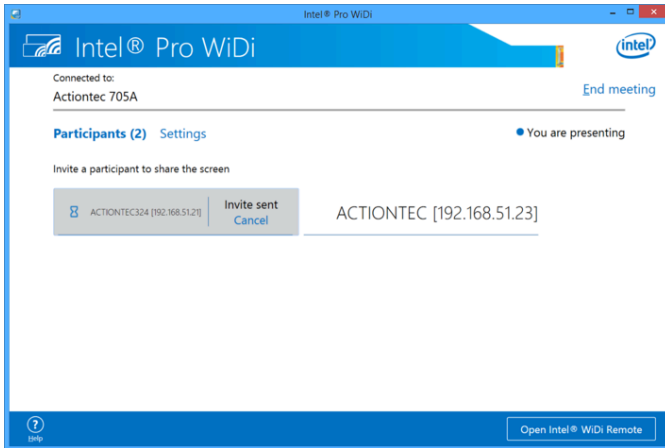


Selecting this mode generates a new screen, with possible participants listed.

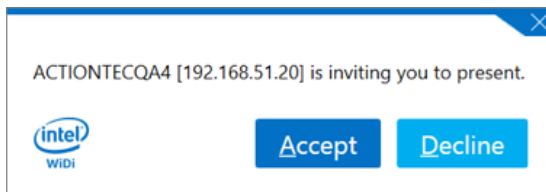


Display Options

Clicking on a participant sends an invitation to the participant. Click **Cancel** to rescind the invitation.



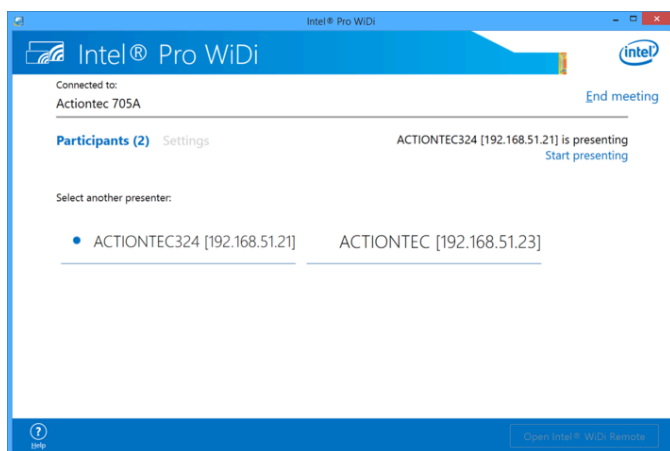
A invitation appears on the chosen participant's device.



Click **Accept** to present, or **Decline** to reject.

ScreenBeam Pro - Business Edition

If the invited participant accepts the invitation, his/her device's screen will immediately be shown on the projector/display. Sharing information is also displayed on the manager's WiDi screen:

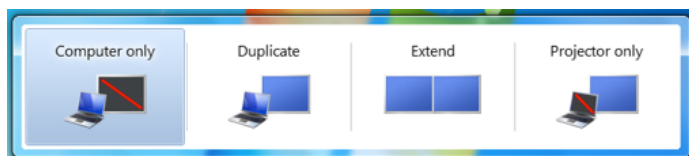
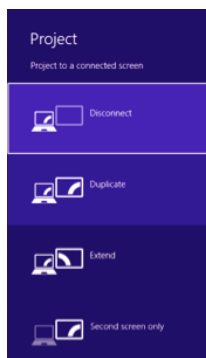


To resume presenting from the manager's device, click **Start presenting**.

Display Mode

ScreenBeam Pro supports three display modes when connected with a compatible wireless display application (Intel WiDi or Windows 8.1 Project, for example).

In Windows, press the Windows logo + P keys simultaneously to launch the display options and select the desired display mode from the options.



Duplicate

The Duplicate mode is used to display the same content on both the device's screen and the HDTV simultaneously.

Note: There may be minor delay between the content displayed on the HDTV screen compared to the device's screen. This is due to the current state of wireless display technology.

Extend

The Extend mode creates a single, extended “screen” between the source device and the HDTV. When in Extend mode, dragging windows to the right side of the device’s screen displays those windows on the HDTV, while dragging windows to the left of the HDTV screen displays them back on the device’s screen. This mode allows users to display selected content on the HDTV, while all other windows remain on the device’s screen. When this mode is first selected, the HDTV displays only the Windows desktop.

Second Screen Only

The Second Screen Only mode causes the HDTV to be the only display for the device. All content will be displayed on the HDTV; the source device’s screen will be blank.

Ultra-Low Delay

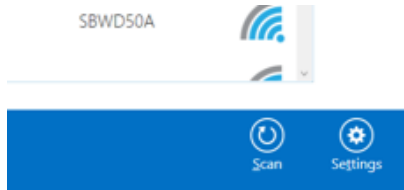
ScreenBeam Pro also supports Ultra-Low Delay mode, which helps reduce end-to-end wireless display latency. Real-time applications, such as games, can run without noticeable delay when Ultra-Low Delay mode is enabled on supported devices.

Intel WiDi

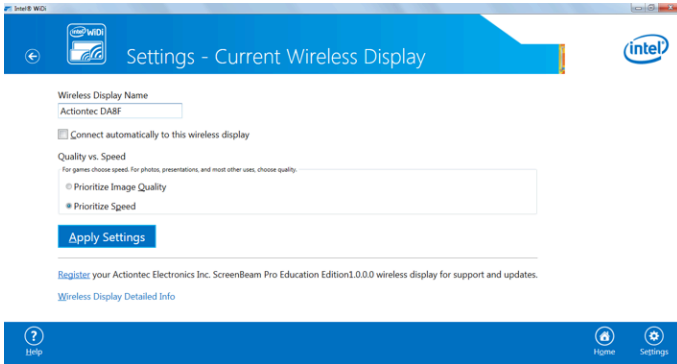
You can activate Ultra-Low Delay on a device running Intel WiDi 3.5 or higher. Follow the steps below to switch to ultra-low delay mode:

1. Launch the Intel WiDi application, connect to ScreenBeam Pro, then click **Settings**.

Display Options



2. In the “Settings” screen, select **Current Display Settings**.



NVIDIA Shield

To activate ultra-low delay with NVIDIA Shield running:

1. Go to “Settings”, then select **Miracast**.
2. Tap on the toggle switch to turn “Game Mode” on.

Note: The output resolution will be set to 720P once this mode is enabled. Refer to the device’s user manual for more information.

Device Management

4

This chapter describes managing the ScreenBeam Pro Receiver using the provided local management web server. Using the web server, the Receiver can be setup, configured, and upgraded.

Accessing the Web Server

There are two ways to log into the local management web server: with Autonomous GO enabled, and with Autonomous GO disabled.

Autonomous GO Enabled

When Autonomous GO is enabled, the SSID of the Receiver is not available. To connect to the Receiver:

1. Connect a device (such as a computer) to the Receiver via USB cable.
2. On the device, enter **http://192.168.16.1** into a web browser's address bar.
3. The web server login screen appears. Enter the user name and password into the appropriate text boxes to log in.

A screenshot of a web browser login page. It features two text input fields: the top one is labeled 'Username' and the bottom one is labeled 'Password'. Both fields are enclosed in a red rectangular border. Below the 'Password' field is a blue button with the word 'Login' in white text.

Note: By default, the user name is “Administrator” and password is “WiDi.” Both the user name and password are case sensitive. These can be modified in the local management web page. See “Resetting User Name and Password” on page 31 for more details.

Autonomous GO Disabled

1. Connect to the Receiver's SSID from a wireless-enabled laptop (or another device with Wi-Fi and a web browser). You can find the SSID in the lower part of the *Ready to connect* screen.

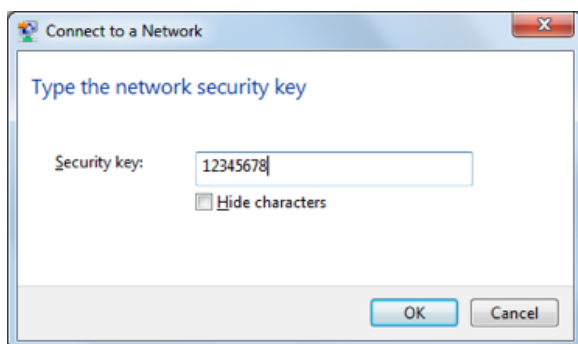


If the network information display is disabled, the SSID is “Actiontec-SBWD-xxxxxx,” with the last four characters being the last four of the Receiver’s name.

2. Click the wireless network icon to open the *Networks* window, and select the Receiver’s SSID.

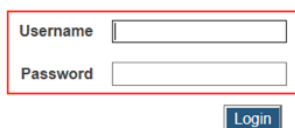


3. The *Connect to a Network* window appears. Enter the network security key in the *Security key* text box, then click **OK**.



The default network security key is “1234568.”

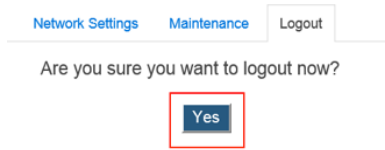
4. Open a web browser and enter **http://192.168.16.1** in the address bar.
5. The web server login screen appears. Enter the user name and password into the appropriate text boxes to log in.



Note: By default, the user name is “Administrator” and password is “WiDi.” Both the user name and password are case sensitive. These can be modified in the local management web page. See “Resetting User Name and Password” on page 31 for more details.

Logging Out

To log out from the web server, click on the *Logout* tab. In the *Logout* window, click **Yes**.



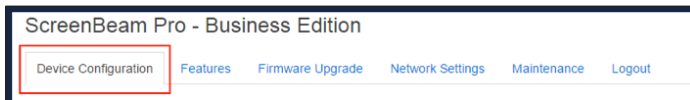
Configuring a ScreenBeam Pro Receiver

Once logged into the web server, Receivers can be configured via the network.

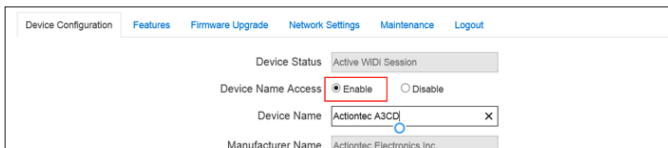
Renaming a Receiver

To rename a Receiver:

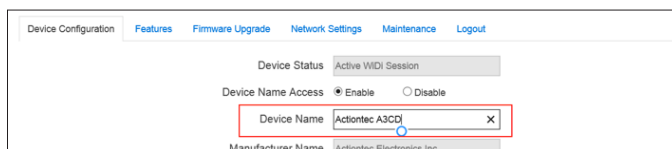
1. Click **Device Configuration**.



2. The *Device Configuration* window appears. Click in the *Enable* check box next to *Device Name Access*.



3. Enter a new name in the *Device Name* text box..



Device Configuration | Features | Firmware Upgrade | Network Settings | Maintenance | Logout

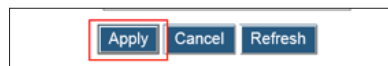
Device Status: Active WDI Session

Device Name Access: ☒ Enable ☐ Disable

Device Name:

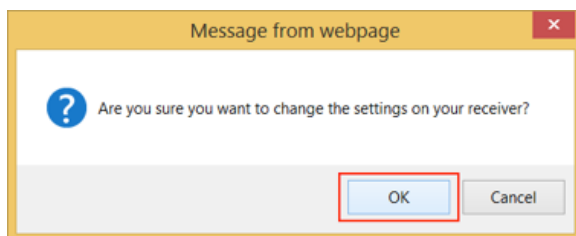
Manufacturer Name: Actiontec Electronics Inc.

4. Click **Apply**.



Apply Cancel Refresh

5. In the *Message from webpage* window that appears, click **OK**.



Message from webpage

Are you sure you want to change the settings on your receiver?

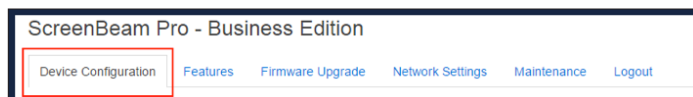
OK Cancel

The Receiver is renamed.

Resetting User Name and Password

To change the user name and password for logging into the web server:

1. Click **Device Configuration**.

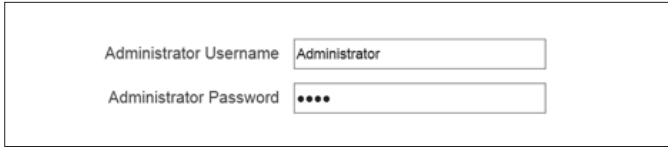


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Device Configuration | Features | Firmware Upgrade | Network Settings | Maintenance | Logout

Device Management

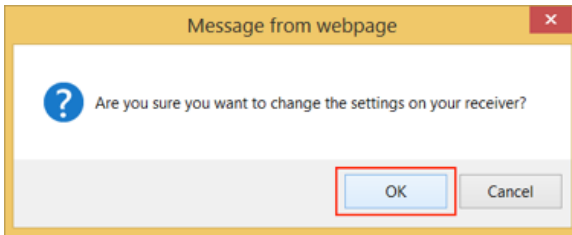
2. The *Device Configuration* window appears. Enter the new user name and password in the appropriate text boxes.



Administrator Username

Administrator Password

3. In the *Message from webpage* window that appears, click **OK**.

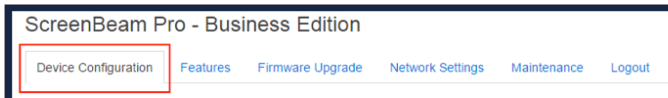


The user name and password are changed.

Changing Display Language

The language of the Receiver's display can be changed. Note that this procedure does not change the language of the web server configuration windows. To change the language on the Receiver's display:

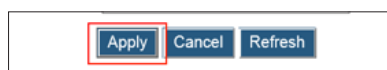
1. Click **Device Configuration**.



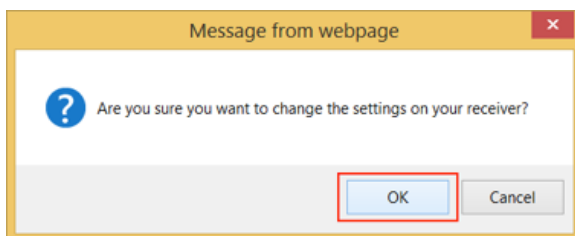
2. The *Device Configuration* window appears. Select a language from the *Display Language* drop-down menu. Currently available languages are Dutch, English, French, Japanese, Korean, Simplified Chinese, Traditional Chinese, Spanish, and German.



3. Click **Apply**.



4. In the *Message from webpage* window that appears, click **OK**.

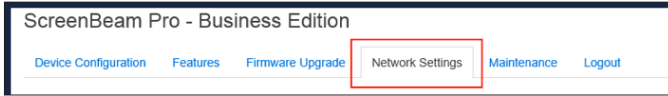


The language of the Receiver's display is changed.

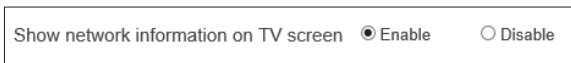
Setting Up Network Information Display

To show network information on the Receiver's display:

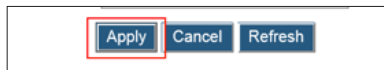
1. Click **Network Settings**.



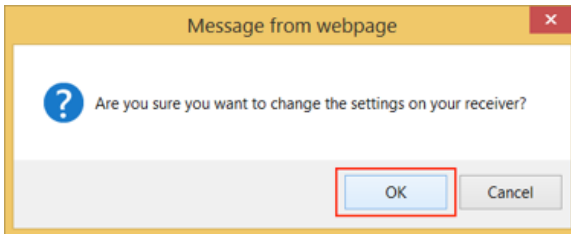
2. The *Network Settings* window appears. Scroll down to the *Show network information on TV screen* options. Click in the *Enable* radio button.



3. Click **Apply**.



4. In the *Message from webpage* window that appears, click **OK**.



The network information is shown on the Receiver's connected display.

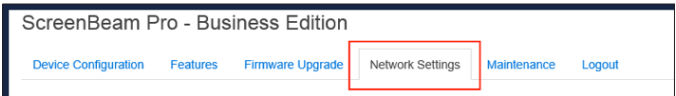


Setting Up Autonomous Group Owner (AGO)

The Autonomous Group Owner option allows a Receiver to be designated as group owner during a P2P connection negotiation. Additionally, the Receiver can determine the channel for communication. In a Wi-Fi P2P group, the group owner operates as an access point and all other devices are clients. After AGO is enabled, the designated Receiver works as the P2P group owner.

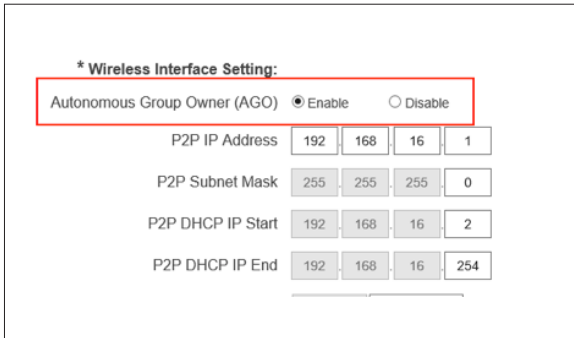
To set up AGO:

1. Click **Network Settings**.



Device Management

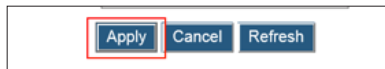
- The *Network Settings* window appears. Scroll down to the *Autonomous Group Owner (AGO)* options. Select an option by clicking in its radio button.
Enable: selecting this option allows the Receiver to define the communication channel. Access control of Managed Meeting and channel selection is available.
Disable: selecting this option causes the communication channel to remain the same as the source device, or determined through negotiation between the Receiver and connecting device. Access control of Managed Meeting and channel selection is not available.



The image shows a 'Wireless Interface Setting' window. A red box highlights the 'Autonomous Group Owner (AGO)' section, which contains two radio buttons: 'Enable' (selected) and 'Disable'. Below this, there are four rows of IP address settings, each with four input fields:

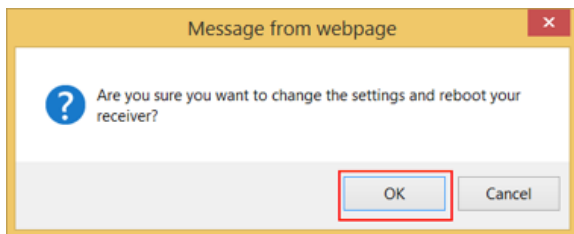
Setting	Field 1	Field 2	Field 3	Field 4
P2P IP Address	192	168	16	1
P2P Subnet Mask	255	255	255	0
P2P DHCP IP Start	192	168	16	2
P2P DHCP IP End	192	168	16	254

- Click **Apply**.



The image shows three buttons: 'Apply', 'Cancel', and 'Refresh'. The 'Apply' button is highlighted with a red box.

- In the *Message from webpage* window that appears, click **OK**.



The image shows a 'Message from webpage' dialog box. It contains a question mark icon and the text: 'Are you sure you want to change the settings and reboot your receiver?'. At the bottom, there are two buttons: 'OK' and 'Cancel'. The 'OK' button is highlighted with a red box.

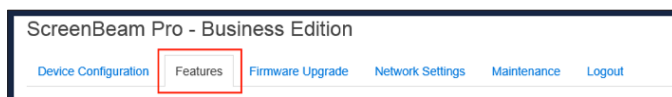
The Receiver reboots. When complete, the new settings are enabled.

Setting Up Group Owner Intent

When the AGO option is disabled, Group Owner Intent is available. This option determines which device (Receiver or connecting device) will be the group owner.

To set up Group Owner Intent:

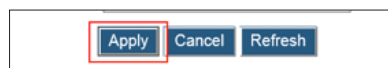
1. Click **Features**.



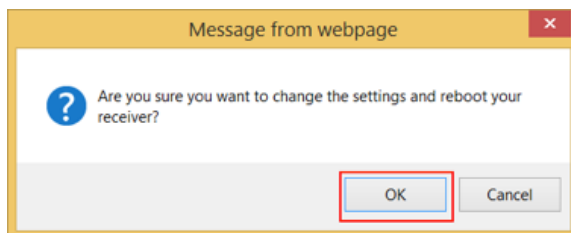
2. Enter a value in the *Group Owner Intent* text box. The larger the value, the more likely the Receiver becomes the group owner of the P2P connection.



3. Click **Apply**.



4. In the *Message from webpage* window that appears, click **OK**.



The Receiver reboots. When complete, the new settings are enabled.

Setting Up Managed Meeting

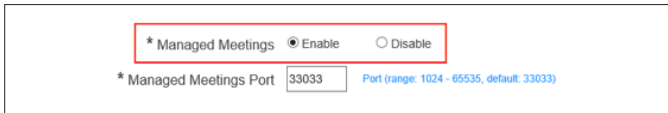
When the AGO option is enabled, Managed Meeting is available. This option allows meeting participants to share the wireless display.

To set up Managed Meeting:

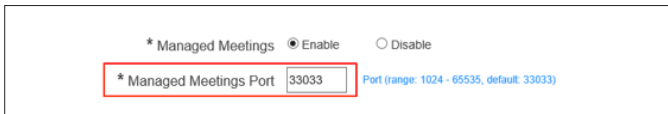
1. Click **Features**.



2. Scroll down to the *Managed Meetings* section. Enable/disable Managed Meeting by clicking in the appropriate radio button.



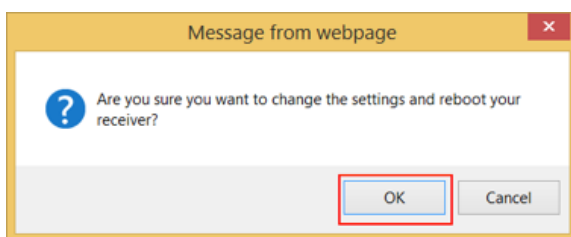
3. For better communication, you can define a port for the Managed Meeting. To do this, enter a port number in the *Managed Meeting Port* text box.



4. Click **Apply**.



5. In the *Message from webpage* window that appears, click **OK**.



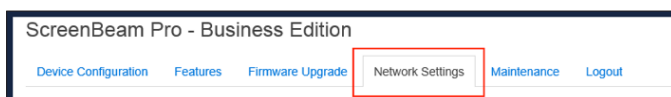
The Receiver reboots. When complete, the new settings are enabled.

Setting Up Communication Channel

When AGO is enabled, a communication channel between the Receiver and source device can be opened.

To set up Communication Channel:

1. Click **Network Settings**.



Device Management

- The *Network Settings* window appears. Scroll down to the *Channel Number* section. Select the desired channel from the *Channel Number* drop-down menu.

The screenshot shows the 'Network Settings' window. The 'Channel Number' dropdown menu is open, displaying a list of channels: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 (highlighted in blue), 36, 40, 44, 48, 149, 153, 157, 161, and 165. A red box highlights the dropdown menu and the 'Channel Number' label. The background settings include 'P2P DHCP IP Start', 'P2P DHCP IP End', 'P2P Wireless Network Name (SSID)', 'P2P Wireless Network Password', and a note about the screenBeam Receiver rebooting.

Select a lightly-used channel in the network environment. Generally, less-busy channels provide better performance. Channels from 1 to 11 are in the 2.4 GHz band; channels from 36 to 165 are in the 5 GHz band.

- Click **Apply**.

The screenshot shows the 'Network Settings' window with the 'Apply' button highlighted by a red box. The 'Cancel' and 'Refresh' buttons are also visible.

- In the *Message from webpage* window that appears, click **OK**.

The screenshot shows the 'Message from webpage' window. The message text is: 'Are you sure you want to change the settings and reboot your receiver?'. The 'OK' button is highlighted by a red box. The 'Cancel' button is also visible.

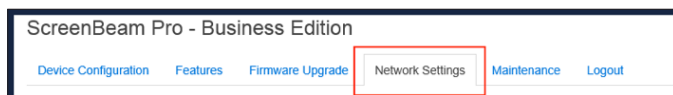
The Receiver reboots. When complete, the new settings are enabled.

Setting Up P2P Network Parameters

When AGO is enabled, network parameters for peer-to-peer (P2P) connections, including P2P wireless network name (SSID), password, IP address, subnet mask, and DHCP IP address range can be defined

To set up P2P network parameters:

1. Click **Network Settings**.



2. The *Network Settings* window appears. Scroll down to the *Wireless Interface Setting* section.

*** Wireless Interface Setting:**

Autonomous Group Owner (AGO) ☒ Enable ☐ Disable

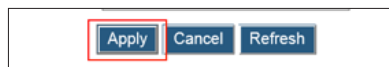
P2P IP Address	192	168	16	1
P2P Subnet Mask	255	255	255	0
P2P DHCP IP Start	192	168	16	2
P2P DHCP IP End	192	168	16	254
P2P Wireless Network Name (SSID)	DIRECT-xy DCA3CD			
P2P Wireless Network Password	12345678			

3. Enter a P2P address in the appropriate text boxes. This is IP address of the Receiver in a P2P connection. The address appears in the left corner of the *Ready to connect* screen.
4. Enter a P2P subnet mask address in the appropriate text boxes. This is the subnet mask for the network established in the P2P connection.
5. Enter the P2P DHCP start and end addresses in the appropriate text boxes. These define the range of IP addresses assigned to the connected devices.

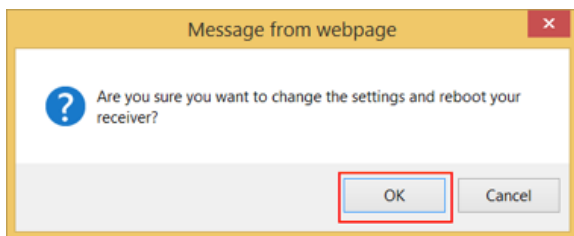
Note: *P2P Wireless Network Name (SSID)* and *P2P Wireless Network Password* are not configurable at this time.

Device Management

6. Click **Apply**.



7. In the *Message from webpage* window that appears, click **OK**.

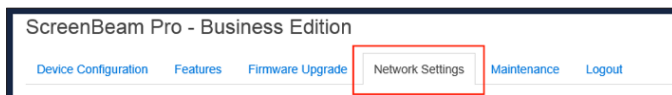


The Receiver reboots. When complete, the new settings are enabled.

Setting Up Ethernet IP Parameters

The Ethernet Interface Setting is used to configure the Ethernet IP address for the connected USB-to-Ethernet adapter. To do this:

1. Click **Network Settings**.



2. The *Network Settings* window appears. Scroll down to the *Ethernet Interface Setting* section.

* Ethernet Interface Setting:

IP Address	192	168	1	1
Subnet Mask	255	255	255	0

3. Enter a IP address in the appropriate text boxes.
4. Enter a subnet mask address in the appropriate text boxes.
5. Click **Apply**.

Apply Cancel Refresh

6. In the *Message from webpage* window that appears, click **OK**.

Message from webpage

Are you sure you want to change the settings and reboot your receiver?

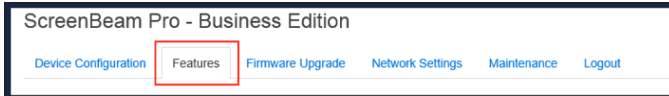
OK Cancel

The Receiver reboots. When complete, the new settings are enabled. Now, when a USB-to-Ethernet adapter is connected to the Receiver, this IP address is displayed in the lower part of the *Ready to connect* screen. Users can use this IP address to access the local management server.

Setting Up WiDi Lower Bandwidth

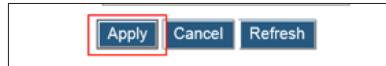
The WiDi Lower Bandwidth setting is used to control video quality and speed. To configure:

1. Click **Features**.

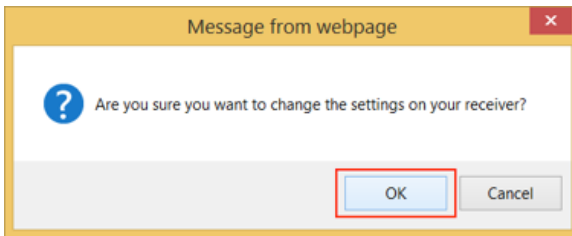


2. The *Features* window appears. Enable/disable *WiDi Lower Bandwidth*. Enabling this setting limits the bandwidth for WiDi, smoothing video playback. Disabling results in better video quality on uncongested networks.

3. Click **Apply**.



4. In the *Message from webpage* window that appears, click OK.

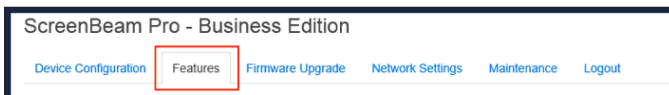


WiDi Lower Bandwidth is configured.

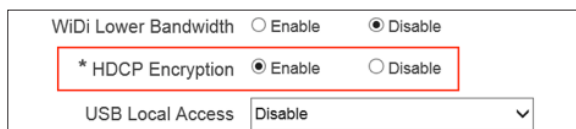
Setting Up HDCP Encryption

The HDCP Encryption setting is used to improve connection speed and compatibility. To set up:

1. Click **Features**.



- The *Features* window appears. Enable/disable *HDCP Encryption*. Enabling this setting allows HDCP-protected media to be played. Disabling improves connection speed and compatibility, but HDCP-protected media cannot be played.

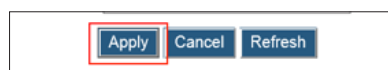


WIDI Lower Bandwidth ☐ Enable ☒ Disable

* HDCP Encryption ☒ Enable ☐ Disable

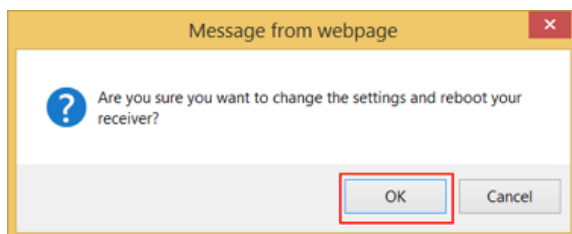
USB Local Access Disable ▼

- Click **Apply**.



Apply Cancel Refresh

- In the *Message from webpage* window that appears, click **OK**.



Message from webpage

Are you sure you want to change the settings and reboot your receiver?

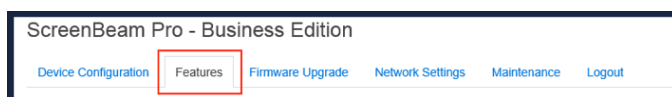
OK Cancel

The Receiver reboots. When complete, the new settings are enabled.

Setting Up PIN Pairing Method

The PIN Pairing Method setting allows the user to define a PIN pairing method when connecting to the Receiver. To set up:

- Click **Features**.



ScreenBeam Pro - Business Edition

Device Configuration **Features** Firmware Upgrade Network Settings Maintenance Logout

Device Management

- The *Features* window appears. Scroll down to the *Force PIN Pairing on First Connection* section, then click in the appropriate radio button. Turning this setting on forces the user to enter a PIN code to access the Receiver for the first time. Turning this setting off disables PIN pairing; PIN entry or PBC must be used when connecting to the Receiver for the first time.

Force PIN Pairing on First Connection: ☒ On ☐ Off Selecting Off enables both PIN and PBC pairing

PIN Generation Method: ☒ Random ☐ Static 1234567 Enter 7 digits to create a static PIN - the 8th digit of the PIN will be generated for you. Static PIN will not appear on the HD/TV/Projector to enable protected mode.

Static PIN:

- If PIN pairing is turned on in step 3, the *PIN Generation Method* is accessible. If **Random** is selected, a PIN code is generated randomly by the system and displayed on the connected display. If **Static** is selected, a seven-digit PIN code can be entered in the appropriate text box. After entering the seven digits, the system generates an eight-digit code and displays it in the *Static PIN* text box. This PIN will not be displayed on the connected display.

Force PIN Pairing on First Connection: ☒ On ☐ Off Selecting Off enables both PIN and PBC pairing

PIN Generation Method: ☐ Random ☒ Static 1234567 Enter 7 digits to create a static PIN - the 8th digit of the PIN will be generated for you. Static PIN will not appear on the HD/TV/Projector to enable protected mode.

Static PIN:

- Click **Apply**.

- In the *Message from webpage* window that appears, click **OK**.

Message from webpage

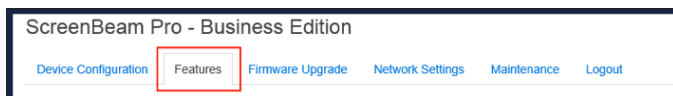
Are you sure you want to change the settings on your receiver?

The PIN Pairing setting is configured.

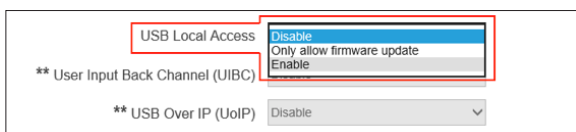
Setting Up USB Local Access

The Receiver features a USB port for various uses. To set up the USB port:

1. Click **Features**.



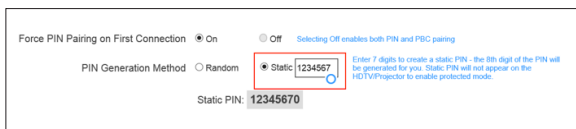
2. The *Features* window appears. Scroll down to the *USB Local Access* section, then select one of the options.



Disable: selecting this option disables the USB port.

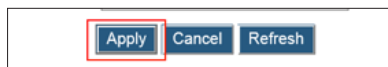
Only allow firmware update: selecting this option allows the USB port to be used for firmware updates only.

Enable: allows full functionality for the USB port, including firmware updates or control of the source device via a keyboard/mouse connected to the Receiver. If this option is chosen, select a method (UIBC or UoIP).



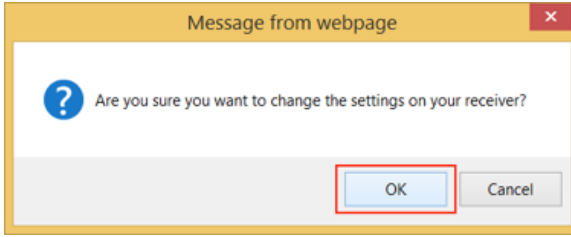
Note: If UIBC is selected, the keyboard will not support combo keys. and the mouse will not support right clicks. UoIP is supported by Intel WiDi only.

3. Click **Apply**.



Device Management

4. In the *Message from webpage* window that appears, click **OK**.

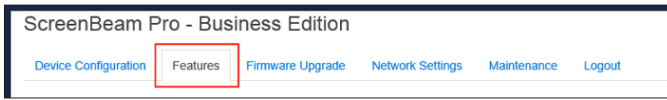


The USB Local Access setting is configured.

Managing HDMI Port Output

The Receiver has options to control HDMI output. To configure:

1. Click **Features**.

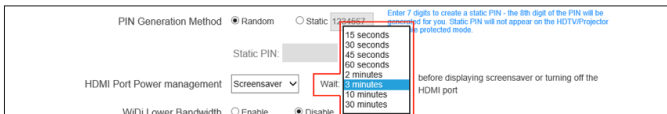


2. The *Features* window appears. Scroll down to the *HDMI Port Power management* section, then select one of the options.



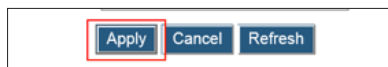
Always on: selecting this option keeps the HDMI output on.

Screensaver: selecting this option allows the system to run a screensaver after the defined idle time expires. Use the *Wait* menu to define an idle time.

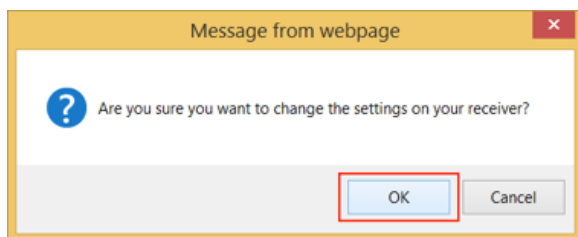


HDMI off: selecting this option turns the HDMI output off after the defined idle time expires. Use the *Wait* menu to define an idle time.

3. Click **Apply**.



4. In the *Message from webpage* window that appears, click **OK**.

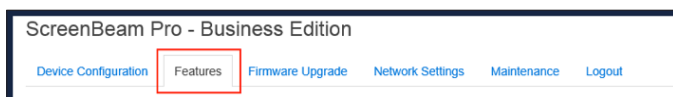


The HDMI Port Output setting is configured.

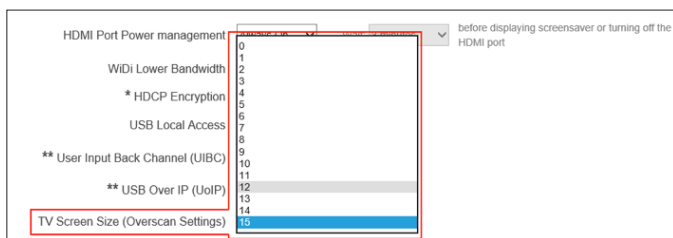
Adjusting TV Screen Size

The Receiver has options to adjust the screen size appearing on the connected display. This option is useful to adjust the image on the display if it is too big or too small. To configure:

1. Click **Features**.

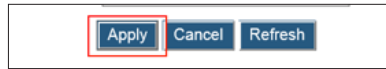


2. The *Features* window appears. Scroll down to the *TV Screen Size (Overscan Settings)* section, then select one of the options.

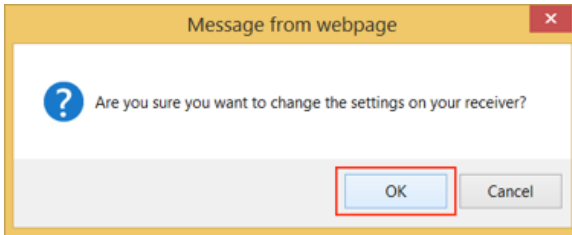


Device Management

3. Click **Apply**.



4. In the *Message from webpage* window that appears, click **OK**.



The TV Screen Size setting is configured.

Updating Background Image

To update the Receiver's background image:

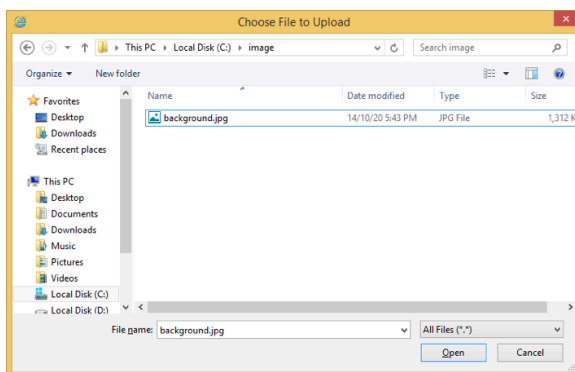
1. Click **Features**.



2. The *Features* window appears. Scroll down to the *Background Image* section, then click **Browse**.

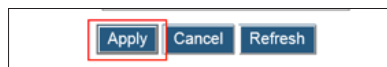


3. The *Choose File to Upload* window appears. Select an image for the background, then click **Open**.

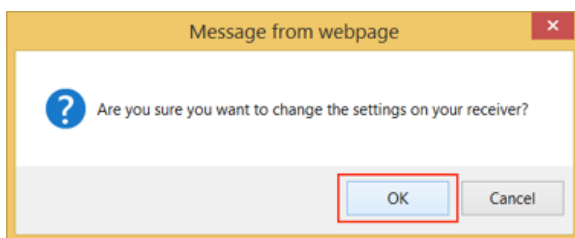


The image must be either a .png or a .jpeg/.jpg file and not exceed 2.5 MB in size, with optimum dimensions of 1280 x 720 pixels.

4. Click **Apply**.



5. In the *Message from webpage* window that appears, click **OK**.

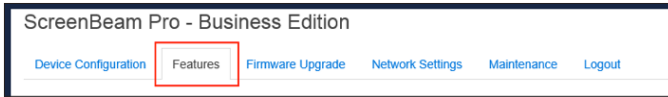


The Background Image setting is configured.

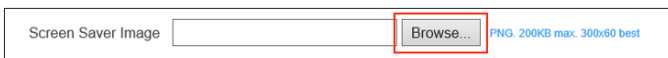
Updating the Screensaver Image

To update the Receiver's screensaver image:

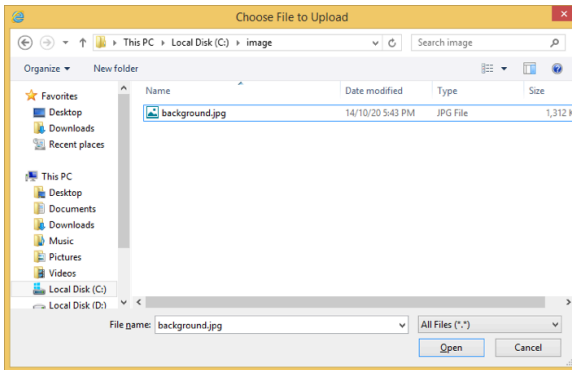
1. Click **Features**.



2. The *Features* window appears. Scroll down to the *Screen Saver Image* section, then click **Browse**.



3. The *Choose File to Upload* window appears. Select an image for the screensaver, then click **Open**.

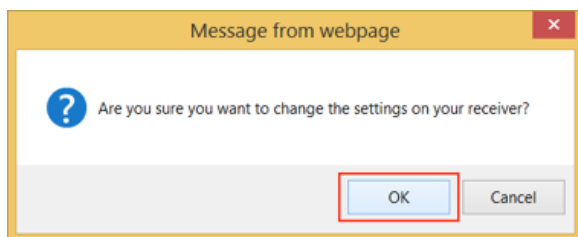


The image must be a .png file and not exceed 200 KB in size, with optimum dimensions of 300 x 60 pixels.

4. Click **Apply**.



5. In the *Message from webpage* window that appears, click **OK**.

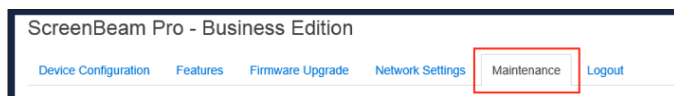


The Screensaver Image setting is configured.

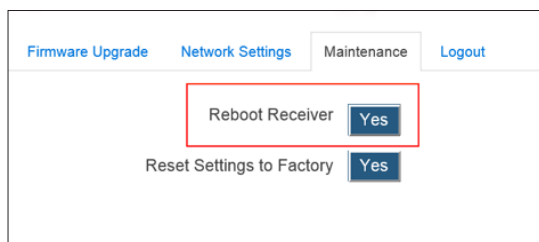
Rebooting the Receiver

To reboot the Receiver:

1. Click **Maintenance**.

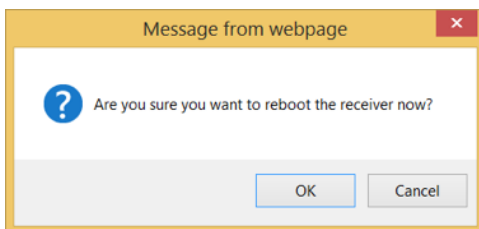


2. The *Maintenance* window appears. Scroll down to the *Reboot Receiver* section, then click **Yes**.



Device Management

3. In the *Message from webpage* window that appears, click **OK**.

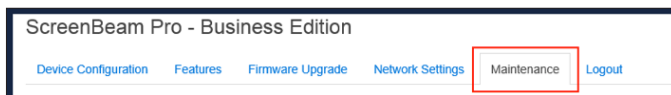


The Receiver reboots.

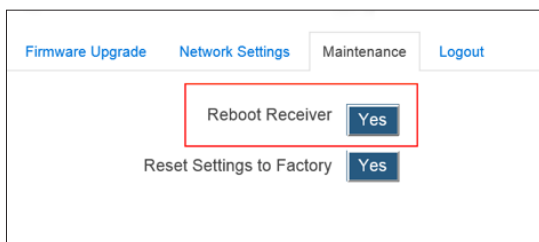
Resetting the Receiver to Factory Defaults

To reset the Receiver to its factory default settings:

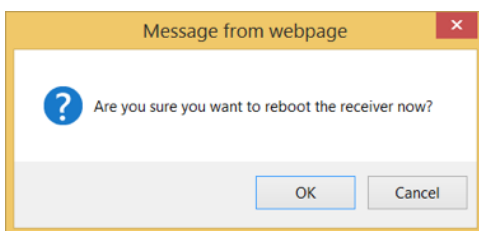
1. Click **Maintenance**.



2. The *Maintenance* window appears. Scroll down to the *Reset Settings to Factory* section, then click **Yes**.



3. In the *Message from webpage* window that appears, click **OK**.



The Receiver reboots. When complete, the Receiver will be operating with its factory default settings. All custom settings are erased.

Resetting Factory Defaults Manually

The Receiver can also be reset to factory default settings manually. To do this:

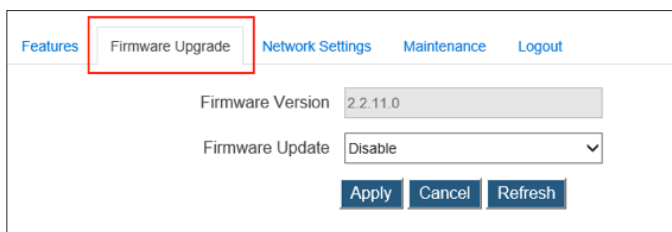
1. Power on the Receiver, and wait until the *Ready to Connect* screen appears on the connected monitor.
2. Hold down the Receiver's *Reset* button with a pin or straightened paper clip.
3. When the *Reset to Default* screen appears on the monitor, release the Reset button.

The Receiver reboots, and it will be operating with its default settings.

Updating the Receiver's Firmware

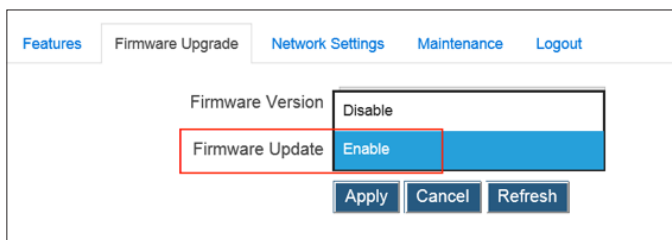
Actiontec periodically provides firmware updates to add functionality and/or eradicate bugs. To update the Receiver's firmware:

1. Click **Firmware Upgrade**.



The screenshot shows a web interface with a top navigation bar containing five links: **Features**, **Firmware Upgrade**, **Network Settings**, **Maintenance**, and **Logout**. The **Firmware Upgrade** link is highlighted with a red rectangular box. Below the navigation bar, the **Firmware Version** is displayed as 2.2.11.0. The **Firmware Update** is currently set to **Disable** in a dropdown menu. At the bottom of the section are three buttons: **Apply**, **Cancel**, and **Refresh**.

2. The *Firmware Upgrade* window appears. Select **Enable** from the *Firmware Update* menu.



The screenshot shows the same web interface, but now the **Firmware Upgrade** menu item is selected, and its content is displayed in a larger window. In this window, the **Firmware Version** is still 2.2.11.0, but the **Firmware Update** dropdown menu is now open, showing the **Enable** option selected and highlighted with a red rectangular box. The **Apply**, **Cancel**, and **Refresh** buttons remain at the bottom.

3. Disconnect the computer from the Receiver's SSID and connect to a router's SSID. The Receiver should also be physically disconnected from the computer.
4. Download the latest firmware from Actiontec's website:
<http://www.actiontec.com/sbupdate>
5. Extract the zip file. There will be an *autorun* folder and an *install.img* file in the extracted file folder.
6. Insert a USB flash drive into the computer.

Note: Do not use a portable hard drive. Use a FAT/FAT32 formatted USB flash drive only.
7. Copy the autorun folder and the install.img file to the root directory of the USB flash drive.
8. Power on the Receiver. Make sure the *Ready To Connect* screen appears on the connected monitor.
9. Remove the USB flash drive from the computer and plug it into the USB port of the Receiver.
10. The Receiver starts to update its firmware. Firmware upgrade status messages will appear on the connected monitor.

Warning! Do not power off the Receiver or remove the USB flash drive while the update is in progress.
11. The Receiver reboots. The firmware upgrade is complete when the *Ready To Connect* screen reappears.

The Receiver's firmware is updated.

Specifications

A

Video

H.264 compression
Supports up to full HD 1080p30 resolution

Audio

LPCM & AAC
Supports up to 5.1 channels

A/V interface

HDMI Type-A female connector
VGA with HDMI-to-VGA adapter model no. YZ-050 (included);
supports the following:

- VGA output, 10-bit resolution up to 165MHz, pixel rate of up to 1080p, and UXGA
- LPCM and compressed surround sound
- Extron RJ45-to-VGA wired projector (up to 100')
- VGA output: 480I/P, 576I/P, 720P, 1080I/P, 640x480, 800x600, 1024x768, 1280x720, 1280x768, 1280x800, 1280x960, 1360x768, 1366x768, and 1920x1080

Note: Does not support protected content playback

Wireless

802.11 a/b/g/n Dual-band 2.4 & 5 GHz
WPA2, WPS virtual PBC, AES 128-bit

Content Protection

HDCP 2.x for HDMI

Electrical

Input: 5V/2A
Consumption: Less than 4W

Firmware Upgrade

Wireless upgrade
USB

Certifications

Wi-Fi Miracast™ (pending)
Intel® WiDi (Gen 4) (pending)

Regulatory Compliance

FCC, IC, and UL

Warranty

1 year, limited

Environmental

Operating temperature: 0 °C to 40 °C (32 °F to 104 °F)

Storage temperature: 0 °C to 70 °C (32 °F to 158 °F)

Operating humidity: 10% to 85%, non-condensing

Storage humidity: 5% to 90%, non-condensing

Compatibility

Intel WiDi-ready Ultrabooks, laptops, and tablets

Wi-Fi Miracast smartphones, tablets, and laptops running Windows 8.1 or Android 4.2 and higher

Non-WiDi/Miracast ready laptops and PCs with Actiontec USB Transmitter running Windows 7 and higher

Not compatible with Apple devices

System Requirements

Windows 8.1 or higher (with Miracast support)

Intel WiDi capable laptop or tablet with Intel WiDi 4 (and higher)

Wi-Fi Miracast capable smartphone, or tablet, or laptop

Note: Specifications are subject to change without notice.

Warranty

This product has a one-year Limited Hardware Warranty and 90-day free software updates from the date of purchase.

Local Law

This Limited Warranty Statement gives the customer specific legal rights. The customer may also have other rights which vary from state to state in the United States, from province to province in Canada, and from country to country elsewhere in the world.

To the extent that this Limited Warranty Statement is inconsistent with local law, this Statement shall be deemed modified to be consistent with such local law. Under such local law, certain disclaimers and limitations of this Warranty Statement may not apply to the customer.

Go to <http://www.actiontec.com/products/warranty.php> for more information.

GPL Info

For GNU General Public License (GPL) related information, go to <http://opensource.actiontec.com>.

EU CE Declaration of Conformity

To obtain the complete Declaration of Conformity form in softcopy, go to the Actiontec Electronics Declarations of Conformity EU/EEA website at <http://international.actiontec.com/support/doc>.

The symbol below is placed in accordance with the European Union Directive 2002/96 on the Waste Electrical and Electronic Equipment (the WEEE Directive). If disposed of within the European Union, this product should be treated and recycled in accordance with the laws of your jurisdiction implementing the WEEE Directive.



Technical Support

Go to <http://www.actiontec.com/sbupdate> for product support, updates, and more information including:

- Firmware updates
- Troubleshooting
- Registration
- FAQs

Technical Support Phone Number

United States: 1-888-436-0657